



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,870	07/18/2003	Kha Choy Foo	ONS00443	5893
7590	09/28/2004		EXAMINER	
James J. Stipanuk Semiconductor Components Industries, L.L.C. Patent Administration Dept - MD/A700 P.O. Box 62890 Phoenix, AZ 85082-2890			KIM, SANG K	
		ART UNIT	PAPER NUMBER	
		3654		
DATE MAILED: 09/28/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/623,870	FOO ET AL. <i>SI</i>	
	Examiner	Art Unit	
	SANG KIM	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-10 and 12-20 is/are rejected.
 7) Claim(s) 11 is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 18 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "a slot in the first receiving reel" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 19, "rotating the first receiving reel at a first rate," is indefinite and vague. What does it mean when applicant refers to "a first rate"?

In claim 12, lines 3-5, "a length sufficient to receive a plurality of receiving reels," is indefinite and vague. What constitutes a sufficient length?

In claim 19:

Line 4, "suitable" is indefinite and vague. What constitutes the term "suitable"?

Line 9, "length sufficient to receive a plurality of receiving reels," is indefinite and vague. What constitutes a sufficient length?

The method of forming the device in claims 12-18 are indefinite and vague. How does applicant form all the claimed device? Is applicant trying to say "providing" rather than "forming"?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-10, 12-15, 17 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lesage, U.S. Patent No. 4351687.

With respect to claims 1 and 10, Lesage '687 shows an apparatus providing a tape and reel handler (not shown, supply from the sheet 13); mounting a plurality of receiving reels (30, 30, 30, figure 2) onto a shaft (11) of an automated reel changer; positioning a first receiving reel (30) of the plurality of receiving reels at a position on the shaft (11) to receive a first carrier tape (13) from the tape and reel handler (not shown, supply from the sheet 13); receiving the first carrier tape (13 from the first reel 30) from the tape and reel handler into a receiving opening (between the bracket 25 leading edge and the winding roll, see figure 1) of the automated reel changer and responsively grasping a first end (when winding at the beginning, 65a will initiate grasping of the first leading end to the mandrel 10); inserting the first end of the first carrier tape into the first receiving reel (30); rotating the first receiving reel and winding the tape; moving a securing device (20, 28a) to contact a second end (trailing piece of 13) of the first carrier tape and responsively attaching the securing device (20, 28a) to the second end of the first carrier tape after the first carrier tape is wound onto the first receiving reel (30); stopping rotation of the first receiving reel (30) after attaching the securing device (28a); and removing the first receiving reel (30) from the shaft (11) while moving a second receiving reel (another 30) of the

plurality of receiving reels to the position to receive a second carrier tape (another 13) from the tape and reel handler, see figures 1-4.

With respect to claim 3, Lesage '687 shows the receiving opening (between the bracket 25 leading edge and the winding roll, see figure 1) of the automated reel changer and responsively grasping a first end with a detecting device (58) (when winding at the beginning, 65a will initiate grasping of the first leading end to the mandrel 10), see figures 1-4.

With respect to claims 4-5, Lesage '687 shows the detecting device (58) moves into and out of a path of the first end of the web by activating a pneumatic cylinder (34), see figure 1.

With respect to claims 6-8, Lesage '687 shows wherein moving the securing device (20,28a) to contact the second end (trailing piece of 13) of the first carrier tape and responsively attaching the securing device (28a) to the second end of the first carrier tape includes moving a pressure roller (29) into contact with the first carrier tape that is wound onto the first receiving reel (30), see figure 3.

With respect to claim 9, Lesage '687 shows a cutting device (48) to cut a first length of the adhesive tape (28) and winding the first length of the adhesive tape onto the first carrier tape, see figure 3.

With respect to claims 12, 13 and 19, Lesage '687 shows a rotationally driven reel shaft (11) having to support a plurality of receiving reels (30); a loader module (no reference number, see figure 2) to receive a first carrier tape (13) and responsively insert a first end (beginning of the web 13) of the first carrier tape

into a first receiving reel of the plurality of receiving reels (30); a securing module (20, 28a) to contact the first receiving reel, attach a securing device (28a), and disengage from the first receiving reel (30); and forming a reel positioner to eject the first reel from the rotationally driven reel shaft and position a second receiving reel (next 30, by taking off the first reel and positioning to a second reel with 34 and 35) to receive another carrier tape (another web 13) form the loader module, see figure 2.

With respect to claim 14, Lesage '687 shows the receiving chamber (between the bracket 25 leading edge and the winding roll, see figure 1) with a pivot arm (21 and 25) that rotates around a shaft (22), see figure 1.

With respect to claim 15, Lesage '687 shows a drive motor (12) to the shaft, see figure 2.

With respect to claim 17, Lesage '687 shows a cutting device (48) to the securing module (20) to perforate the securing device (28), and attaching a counting device (52) to the securing module, see figure 3.

With respect to claim 20, Lesage '687 shows the securing module (28) includes a drive shaft (23,24) coupled to slide the securing module (28) to the plurality of receiving reels (30) and away from the plurality of receiving reels, see figure 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3654

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lesage, U.S. Patent No. 4351687, in view of Baxenden et al, U.S. Patent No. 1967920.

With respect to claim 2, Lesage does not show a slot in the reel.

Baxenden '920 shows a slot (4) in the reel (1), see figure 5.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to place a slot on to the reel as taught by Baxenden '920, since it was known in the art that a slot is often used to secure a free leading web end to the reel.

Allowable Subject Matter

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Art Unit: 3654

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 703-305-3712. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (703) 308-2688. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

9/24/04



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600